

LINEAR COMPRESSOR

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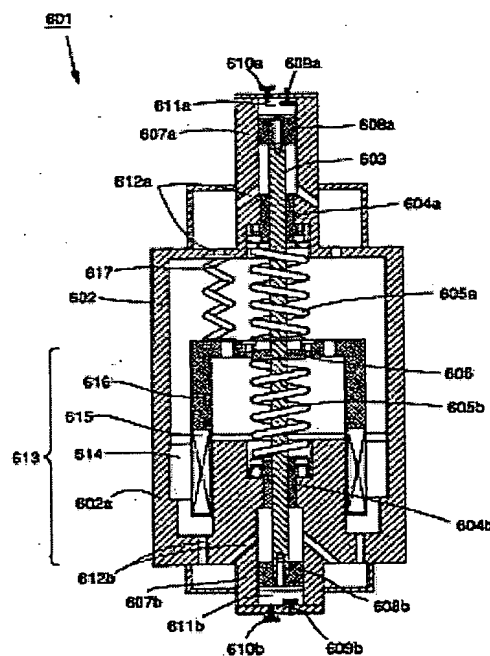
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Abstract of EP0864750

A linear compressor according to the invention is for generating compressed gas and includes two pairs of pistons 608a, 608b and cylinders 607a and 607b coaxially provided and facing opposite to each other, a shaft 603 having pistons 608a and 608b at its ends, coil springs 605a and 605b coupled to shaft 603 for returning a piston departed from a neutral point to the neutral point, and a linear motor 613 for causing shaft 603 to axially move back and forth, thereby generating compressed gas alternately in two compression chambers 611a and 611b. Thus, the non-linear force of the compressed gas acting upon the pistons may be divided into two/reversed in phase. As a result, as compared to a conventional structure having only a single piston, the motor thrust may be reduced and linearized for the purpose of improving the efficiency. Furthermore, the size of the device may be reduced as well as the vibration/noises caused thereby may be reduced.

FIG.2

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